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Schmickel
108 15

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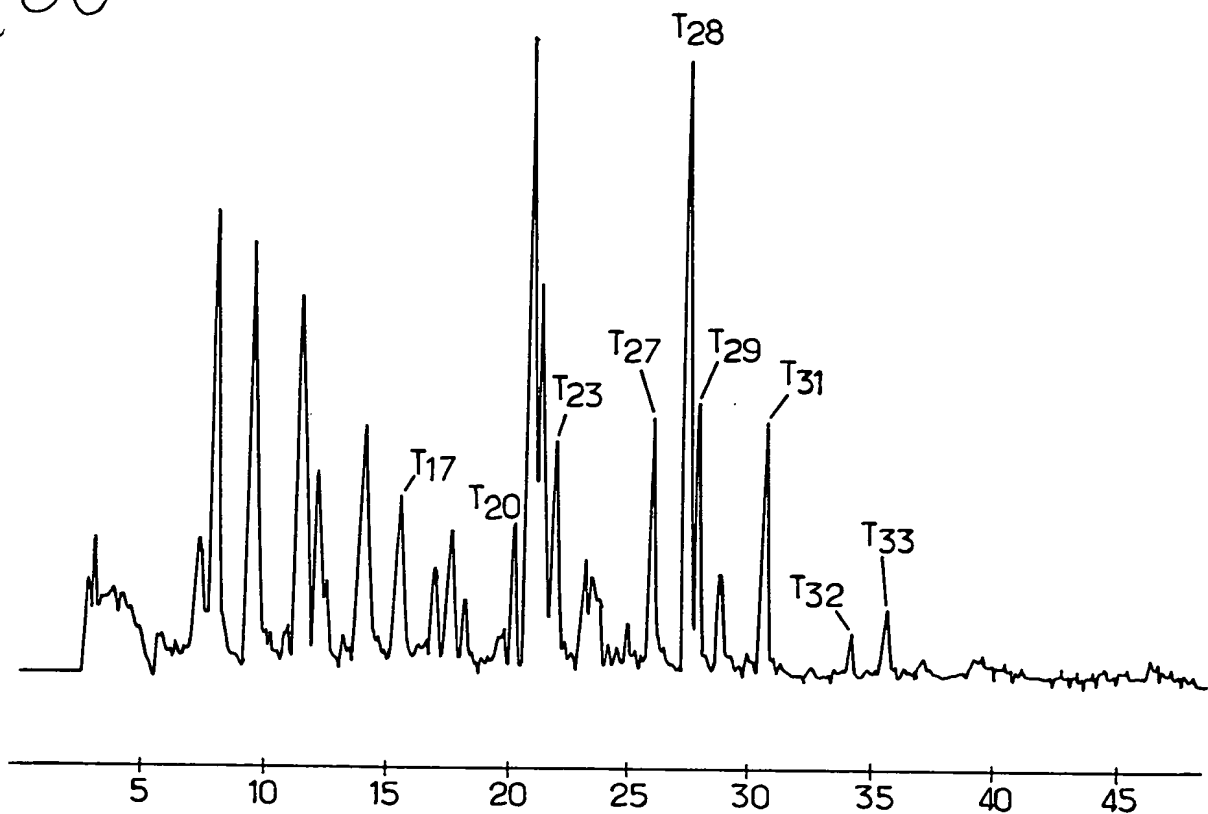


FIG. 1

Elution profile by measurement of the optical density at 218 nm
of the product of tryptic digestion of urate oxidase

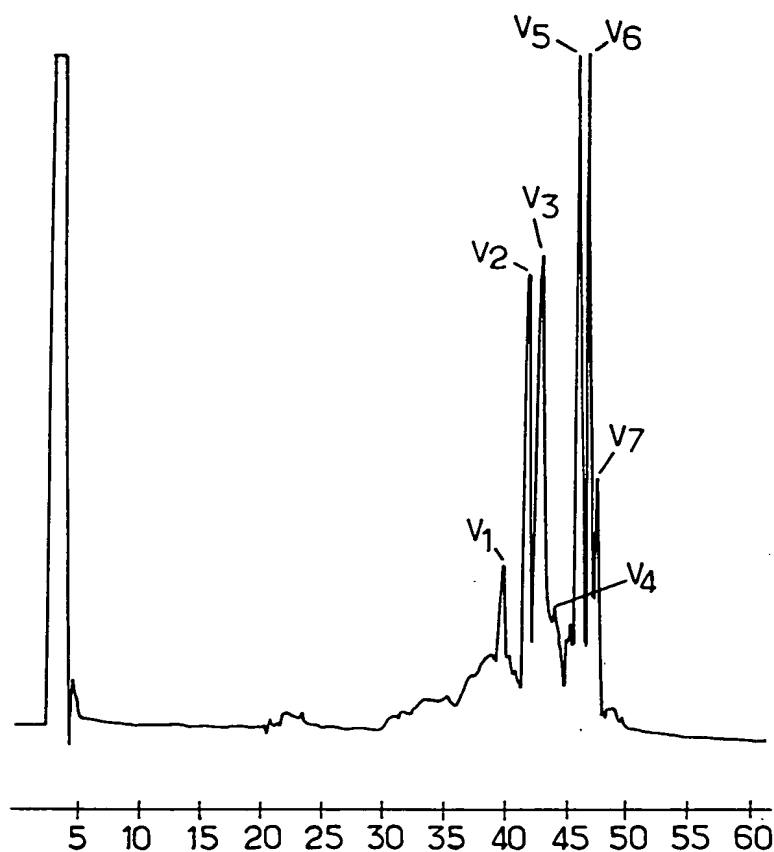


FIG. 2

Elution profile by measurement of the optical density at 218 nm
of the product of digestion of urate oxidase with protease V8

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1  AAACCTCACTGCCTCTCTCATTCCTTCCG GTGCCCCCGATCCTCAATCCAACCTGTGTACA 60
61  TACTTCTCCCAACTCTCTGCTATATCCTTC ATATTCCCATACTACAAGATGTCCGCAGTA 120
121 AAAGCAGCCCGCTACGGCAAGGACAAATGTC CGCGTCTACAAGGTTCAACAAGGACGAGAAG 180
181 ACCGGTGTCCAGACGGGTGTACGAGATGACC GTCTGTGTGCTTCTTGAGGGGTGAGATTGAG 240
241 ACCTCTTACACCAAGGGCCGACAACAGCGTC ATTGTGGCAACCGACTCCATTAAAGAACACC 300
301 ATTTACATCACGGCCAAGCAGAACCCCGTT ACTCCTCCCGAGCTGTTCCGGCTCCATCCTG 360
361 GGCACACACTTCATTGAGAAGTACAACCCAC ATCCATGCCGCTCAGTCAACATTGTCTGC 420
421 CACCGCTGGACCCGGATGGACATTGACGGC AAGCCACACCCCTCACTCCTTCATCCGCGAC 480
481 AGCGAGGAGAAAGCGGAATGTGCAGGTGGAC GTGGTCGAGGGCAAGGGCATCGATATCAAG 540
541 TCGTCTCTGTCCGGCCTGACCGTGCTGAAG AGCACCAACTCGCAGTTCTGGGGCTTCCTG 600
601 CGTGACGAGTACACCACTTAAGGAGACC TGGGACCGTATCCTGAGCACCCGACGTGCGAT 660
661 GCCACTTGGCAGTGGAGAATTTCAAGTGA CTCCAGGAGGTCCGCTCGCACGTGCCTAAG 720
721 TTCGATGCTACCTGGGCCACTGCTCGCGAG GTCACCTCTGAAGACTTTTGTGTAAGATAAC 780
781 AGTGCCAGCGTGCAGGCCCACTATGTACAAG ATGGCAGAGCAAAATCCTGGCGGCCAGCAG 840
841 CTGATCGAGACTGTGCGAGTACTCGTTGCCT AACAAAGCACTATTTTCGAAATCGACCTGAGC 900
901 TGGCACAAGGGCCTCCAAACACACCGGCAAG AACGCCGAGGTCTTCGCTCCTCAGTCGGAC 960
961 CCCAACGGTCTGATCAAGTGTACCGTCGGC CGGTCTCTCTCTGAAGTCTAAATTGTAAACC 1020
1021 AACATGATTCTCAGCTTCCGGAGTTTCCAA GGCAAACTGTATATAGTCTGGGATAGGTA 1080
1081 TAGCATTTCACCTTGTTTTTTTACTTCCA AAAAAAAAAA...

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FIG. 3

Nucleotide sequence of clone 9C and of part of clone 9A

↓ : start of clone 9A

| | | | |
|-----|--------------------------------|---------------------------------|-----|
| 109 | ATGTCCGCAGTAAAGCAGCCCGCTACGGC | AAGACAATGTCCGGTCTACAAGGTTTAC | 168 |
| 1 | MetSerAlaValLysAlaAlaArgTyrGly | LysAspAsnValArgValTyrLysValHis | 20 |
| 169 | AAGGACGAGAAGACCGGTGTCCAGACGGTG | TACGAGATGACCGTCTGTGTGCTTCTGTGAG | 228 |
| 21 | LysAspGluLysThrGlyValGlnThrVal | TyrGluMetThrValCysValLeuLeuGlu | 40 |
| 229 | GGTGAGATTGAGACCTCTTACACCAAGGCC | GACAACAGCGTCATTGTGCGAACCGACTCC | 288 |
| 41 | GlyGluIleGluThrSerTyrThrLysAla | AspAsnSerValIleValAlaThrAspSer | 60 |
| 289 | ATTAAGAACACCATTTACATCACCGCCAAG | CAGAACCCCGTTACTCTCTCCCGAGCTGTTT | 348 |
| 61 | IleLysAsnThrIleTyrIleThrAlaLys | GlnAsnProValThrProGluLeuPhe | 80 |
| 349 | GGCTCCATCCTGGGCACACACTTCATTGAG | AAGTACAACCATCTCCATGCCGCTCACGTC | 408 |
| 81 | GlySerIleLeuGlyThrHisPheIleGlu | LysTyrAsnHisIleHisAlaAlaHisVal | 100 |
| 409 | AACATTGTCTGCCACCGCTGGACCCGGATG | GACATTGACGGCAAGCCACACCCCTCACTCC | 468 |
| 101 | AsnIleValCysHisArgTyrThrArgMet | AspIleAspGlyLysProHisProHisSer | 120 |
| 469 | TTCATCCGCGACAGGAGGAAGCGGAAT | GTGCAGGTGGACGTGGTCGAGGGCAAGGGC | 528 |
| 121 | PheIleArgAspSerGluGluLysArgAsn | ValGlnValAspValValGluGlyLysGly | 140 |
| 529 | ATCGATATCAAGTCGTCTCTGTCCGGCCTG | ACCGTGTCTGAAGAGCACCAACTCGCAGTTC | 588 |
| 141 | IleAspIleLysSerSerLeuSerGlyLeu | ThrValLeuLysSerThrAsnSerGlnPhe | 160 |
| 589 | TGGGGCTTCCTGCGTGACGAGTACACCACA | CTTAAGGAGACCTGGGACCGGTATCCTGAGC | 648 |
| 161 | TrpGlyPheLeuArgAspGluTyrThrThr | LeuLysGluThrTrpAspArgIleLeuSer | 180 |
| 649 | ACCGACGTCGATGCCACTTGGCAGTGGAG | AATTTCAGTGGACTCCAGGAGGTCCGCTCG | 708 |
| 181 | ThrAspValAspAlaThrTrpGlnTrpLys | AsnPheSerGlyLeuGlnGluValArgSer | 200 |

FIG. 4 (cont. next page)

| | | | |
|------|---------------------------------|----------------------------------|------|
| 709 | CACGTGCCCTAAGTTCGATGCTACCTGGGCC | ACTGCTCGCGAGGTCACTCTGAAGACTTTT | 768 |
| 201 | HisValProLysPheAspAlaThrTrpAla | ThrAlaArgGluValThrLeuLysThrPhe | 220 |
| | <u>T23</u> | | |
| 769 | GCTGAAGATAACAGTCCAGCGTGCAGGCC | ACTATGTACAAGATGGCAGAGCAAAATCCTG | 828 |
| 221 | AlaGluAspAsnSerAlaSerValGlnAla | ThrMetTyrLysMetAlaGluGlnIleLeu | 240 |
| | <u>V2</u> | | |
| 829 | GCGCGCCAGCAGCTGATCGAGACTGTCGAG | TACTCGTTGCCCTAACAAAGCACTATTTCGAA | 888 |
| 241 | AlaArgGlnGlnLeuIleGluThrValGlu | TyrSerLeuProAsnLysHisTyrPheGlu | 260 |
| | <u>V1</u> | | |
| 889 | ATCGACCTGAGCTGGCACAAGGCCCTCCAA | AACACCGGCAAGACGCCGAGGTCTTCGCT | 948 |
| 261 | IleAspLeuSerTrpHisLysGlyLeuGln | AsnThrGlyLysAsnAlaGluValPheAla | 280 |
| | <u>T27</u> | | |
| 949 | CCTCAGTCGGACCCCAACGGTCTGATCAAG | TGTACCGTCGGCCGGTCTCTCTGAAGTCT | 1008 |
| 281 | ProGlnSerAspProAsnGlyLeuIleLys | CysThrValGlyArgSerSerLeuLysSer | 300 |
| 1009 | AAATTGTAA | | |
| 301 | LysLeuEnd | | |

FIG. 4 (contd.)

DNA sequence opened by ATG in position 109 in Figure 3 and polypeptide coded for.

The sequenced peptides obtained by hydrolysis of A. flavus urate oxidase with trypsin and protease V8 are shown by arrows opposite the polypeptide coded for, according to

← : tryptic peptide
 ← : peptide obtained by hydrolysis with protease V8.

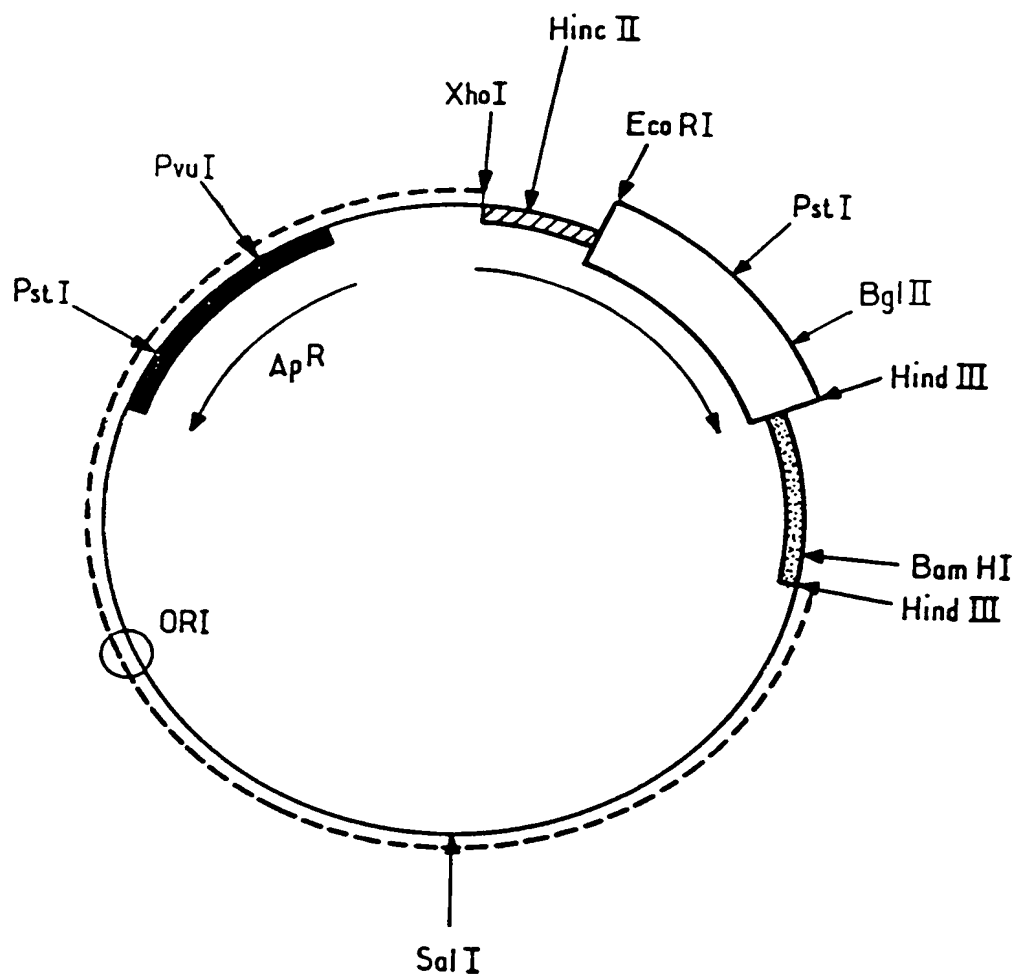


FIG. 5

Plasmid p 163,1

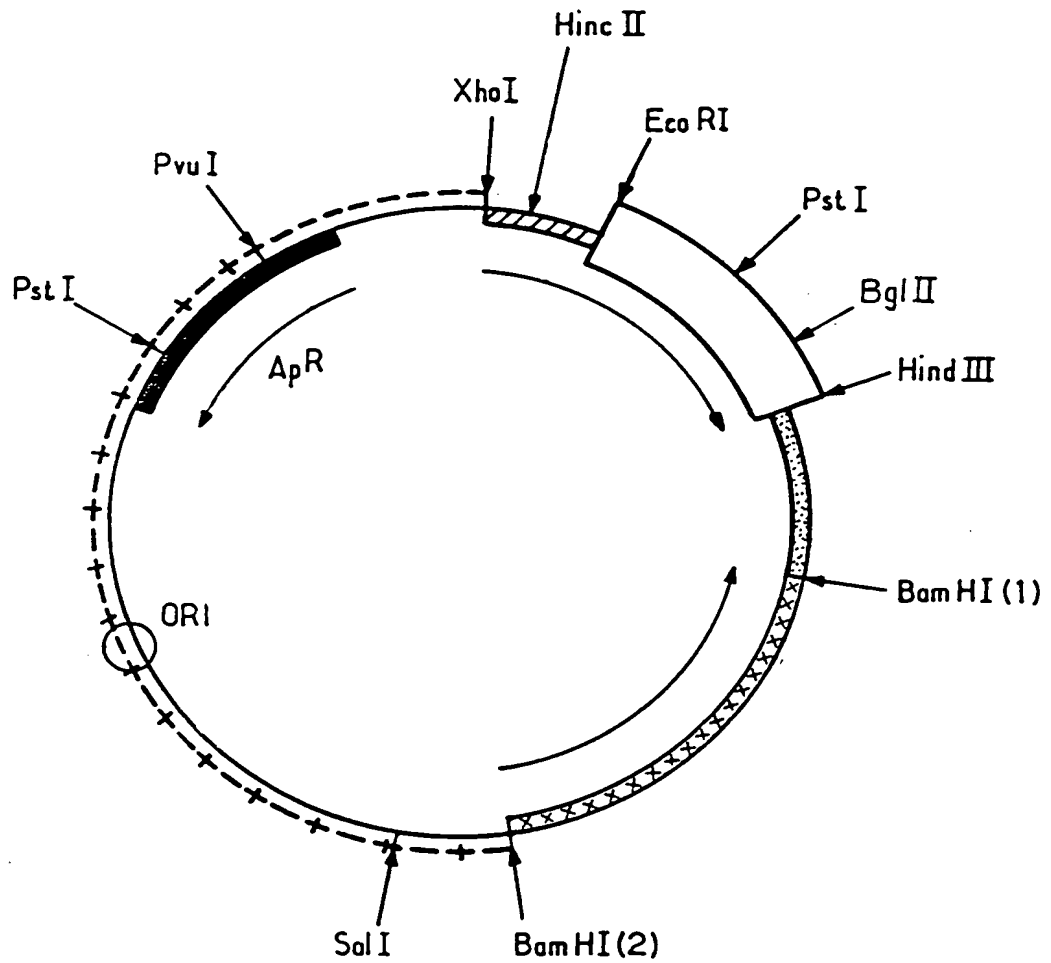


FIG. 6

Plasmid p 160

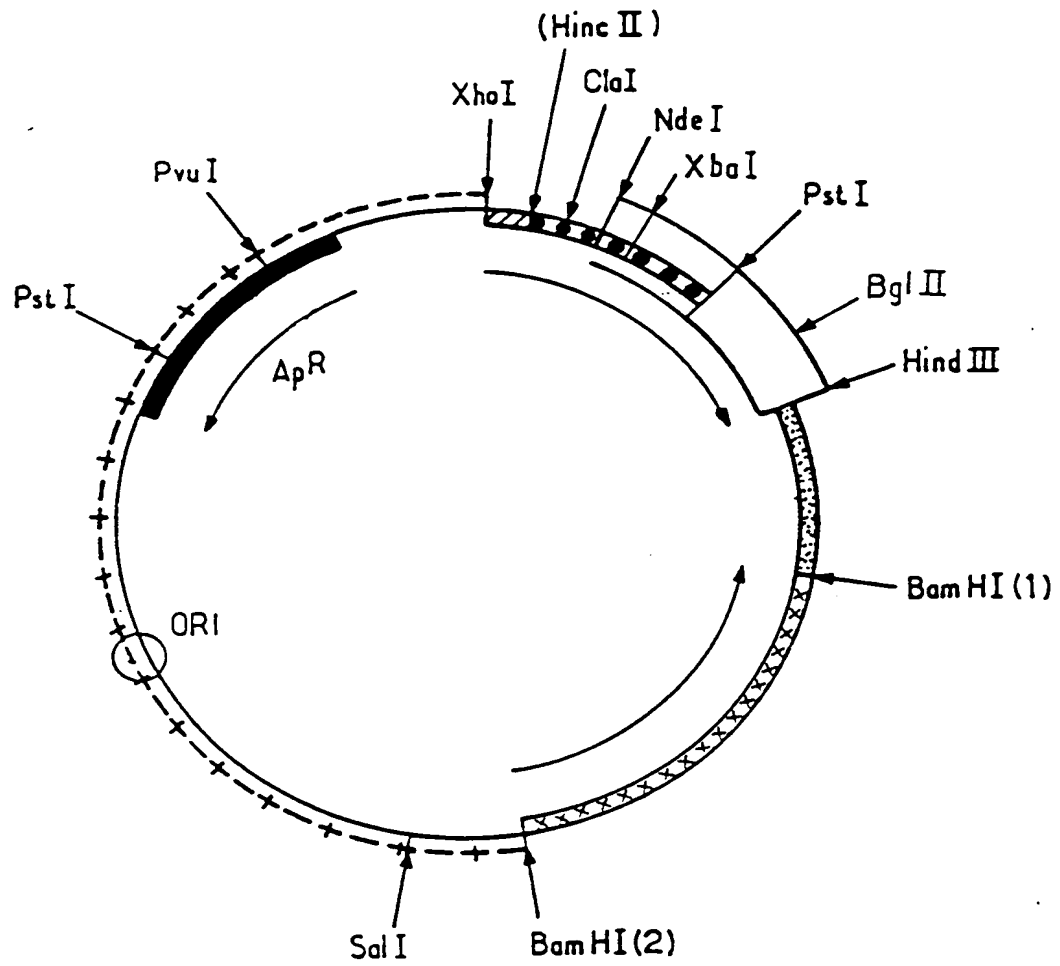


FIG. 7

Plasmid p 373,2

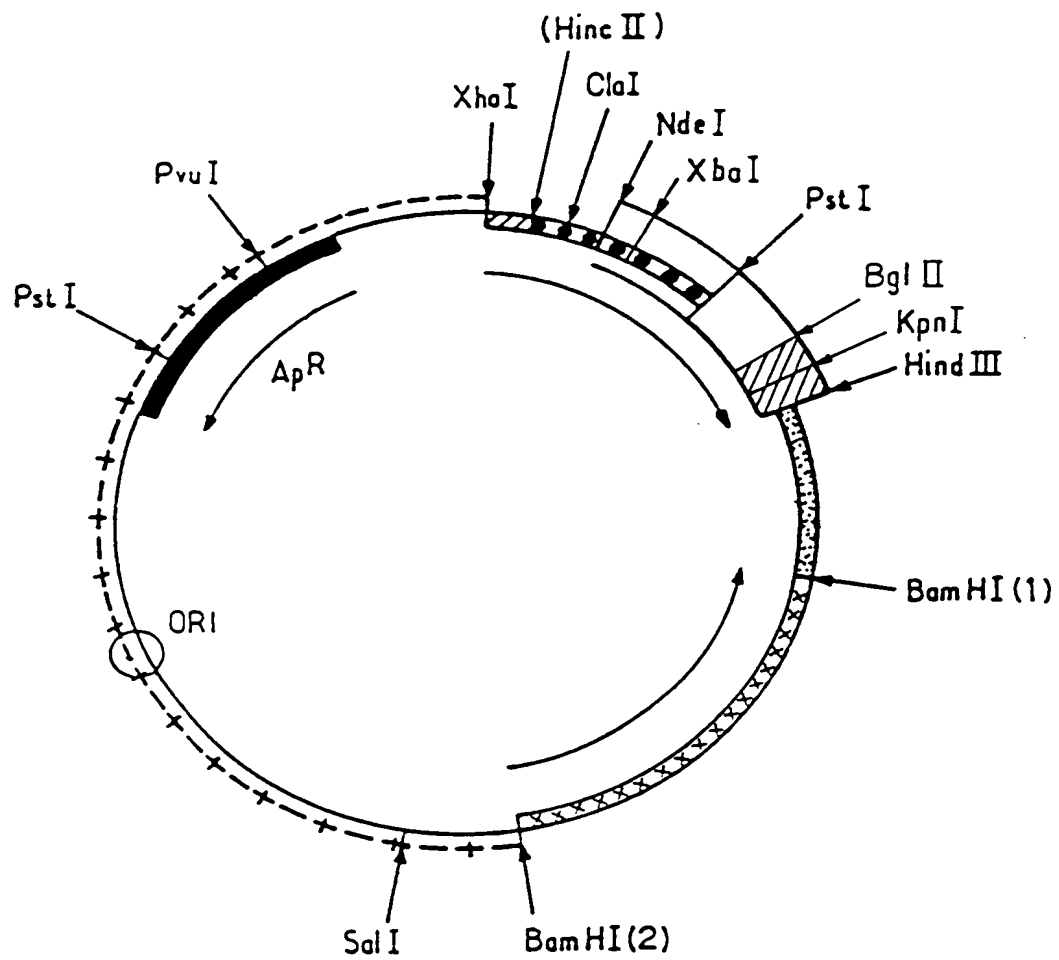


FIG. 8

Plasmid p 462

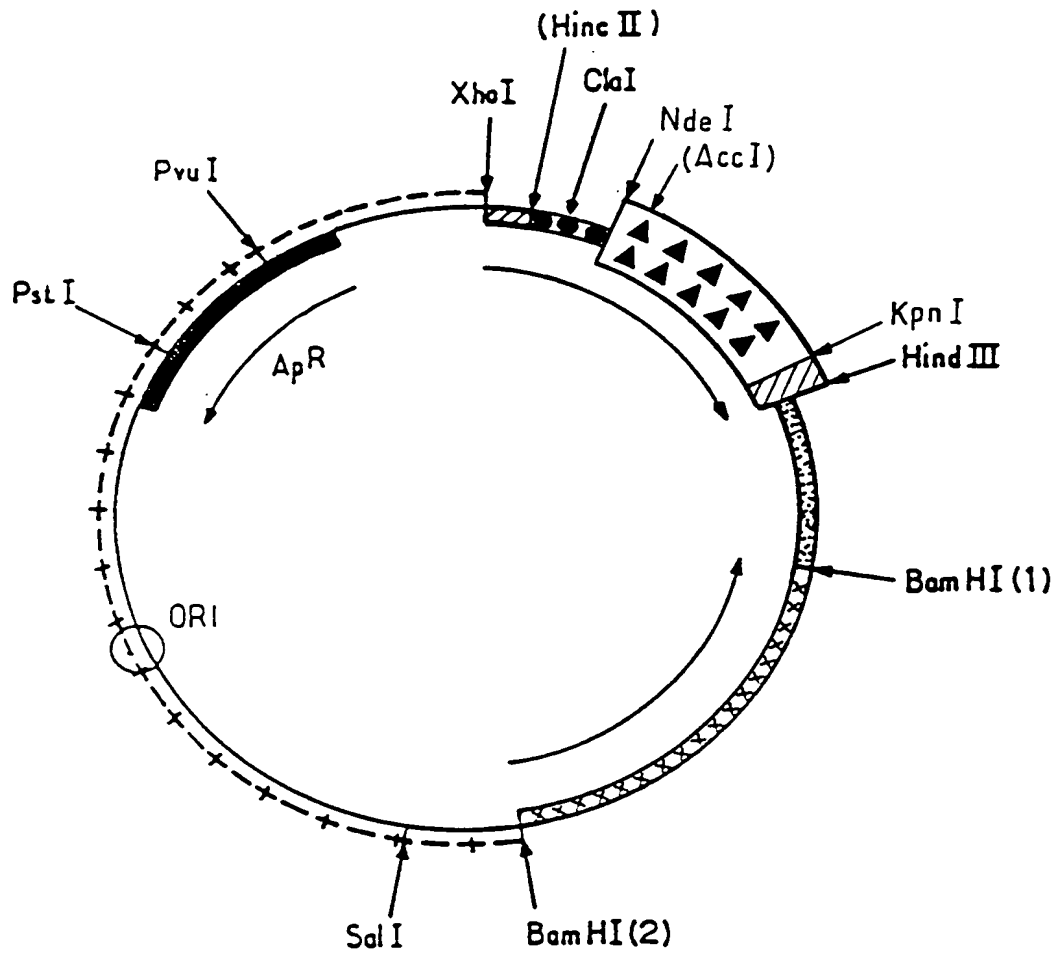


FIG. 9

Plasmid p466

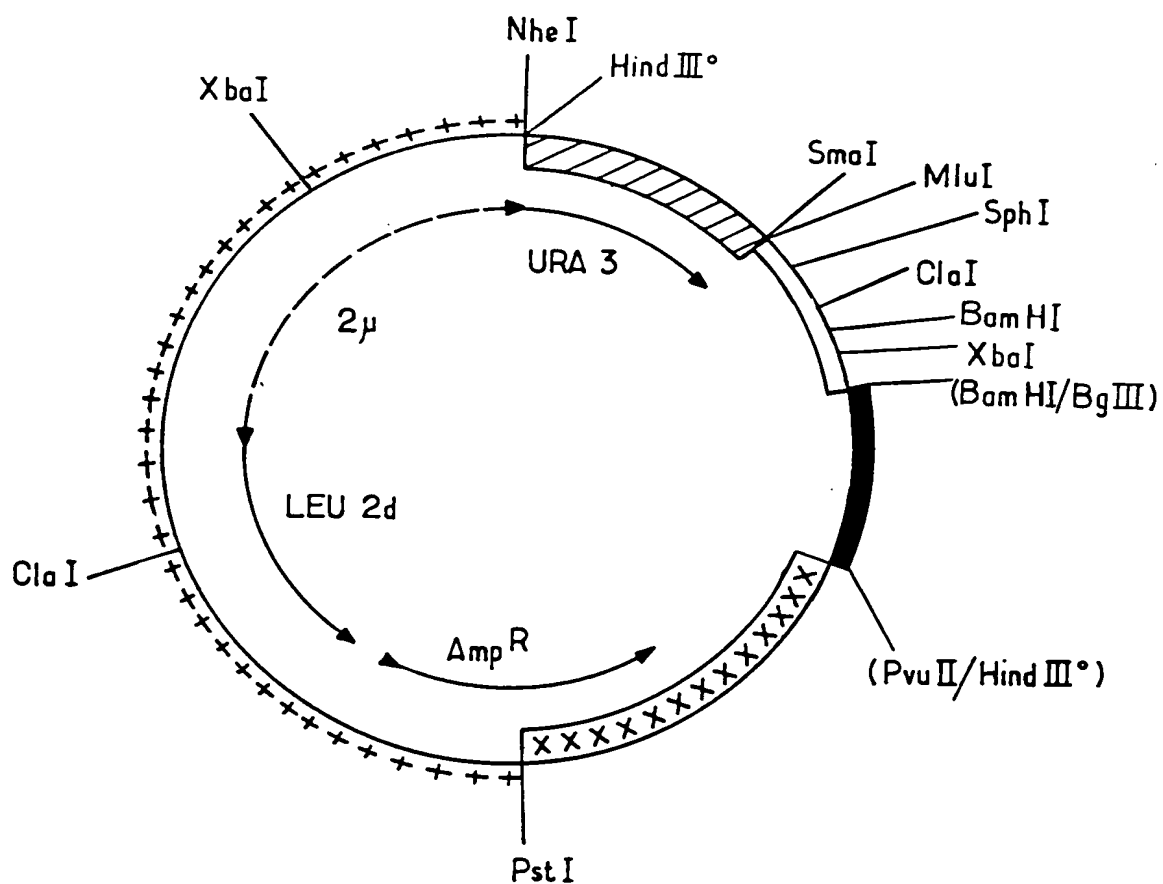


FIG.10

Plasmid pEMR 414

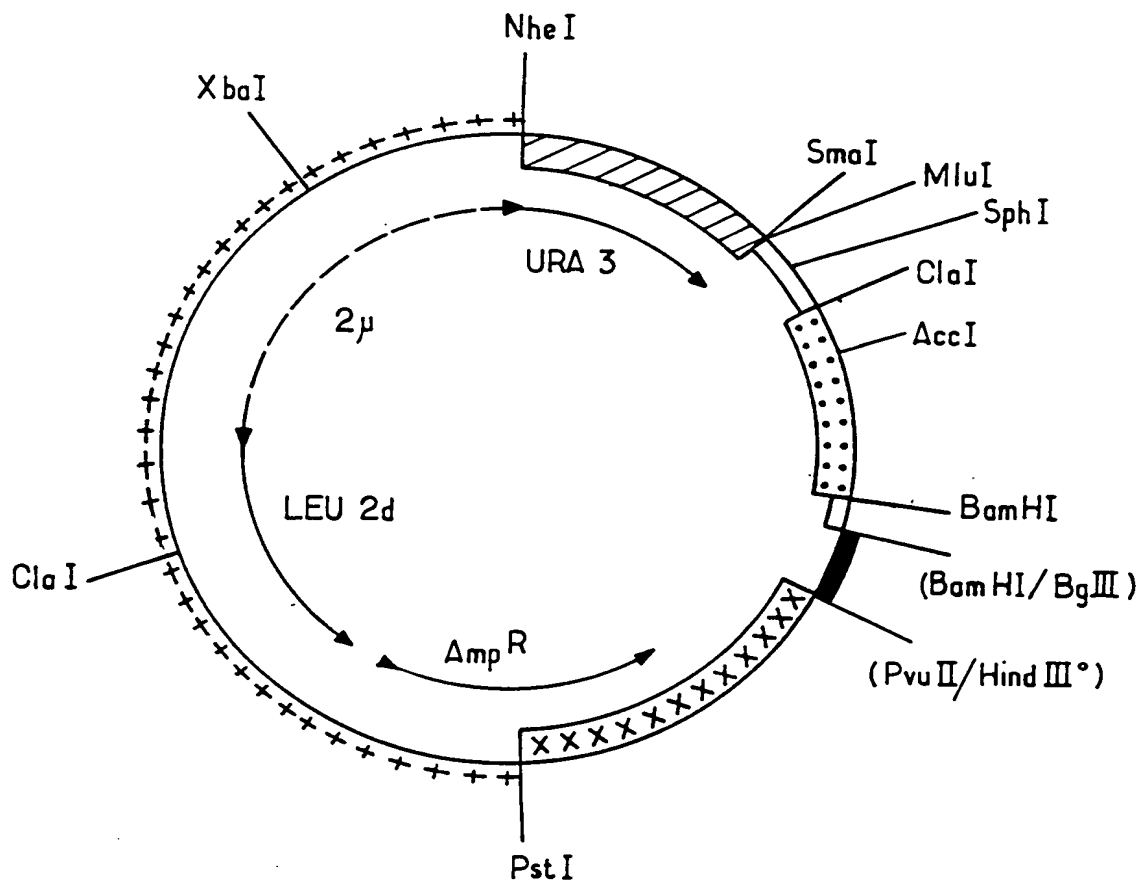


FIG.11

Plasmid pEMR 469

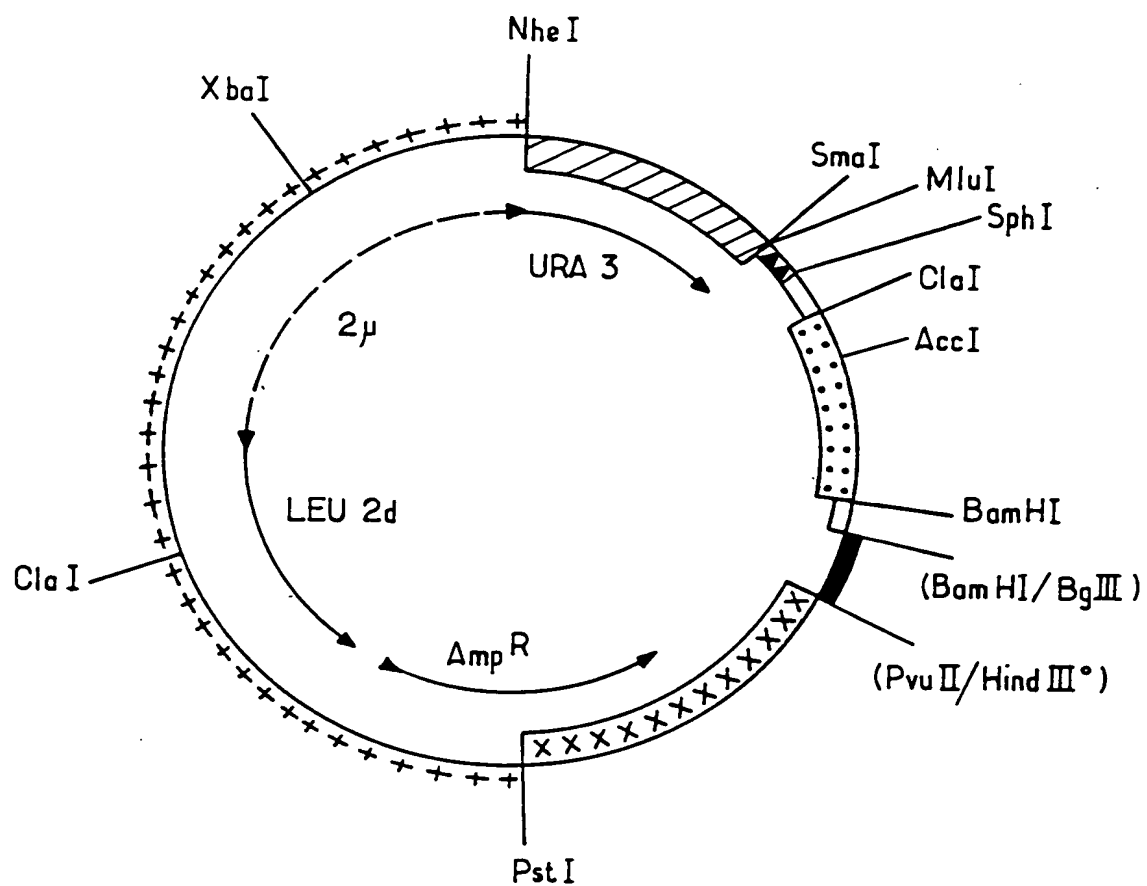


FIG.12

Plasmid pEMR 473

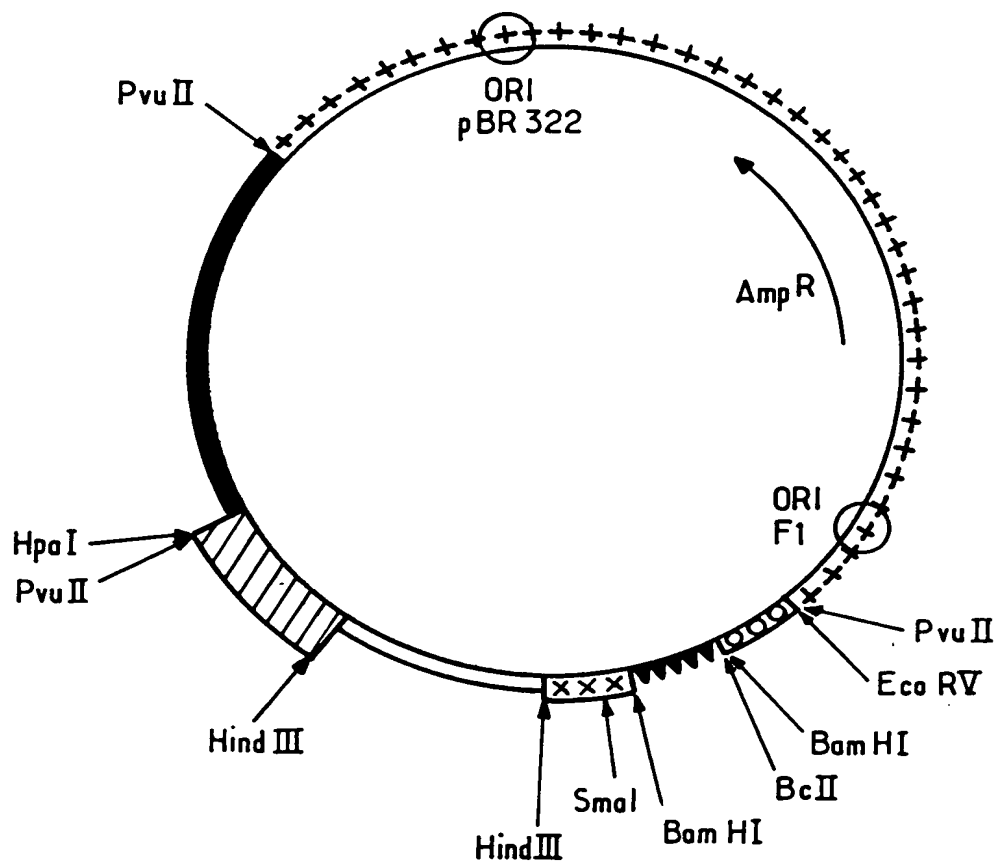


FIG.13

Plasmid PSE 1

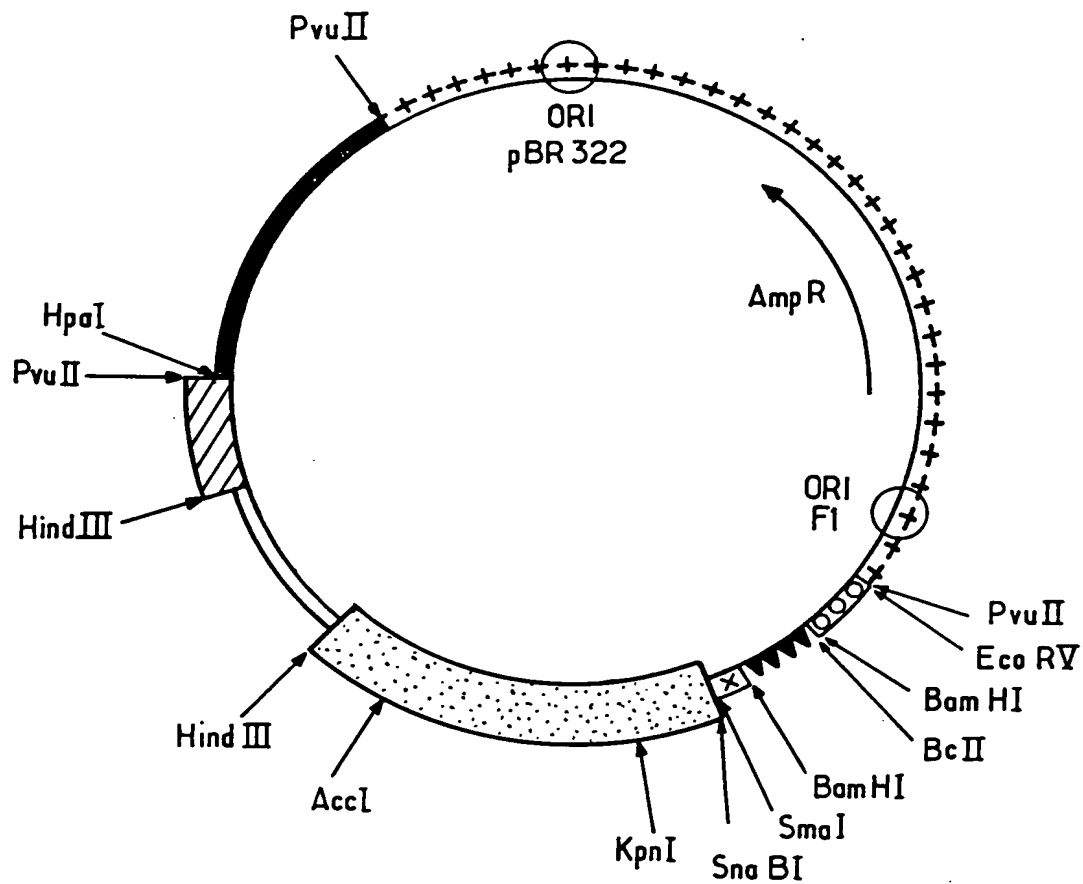


FIG.14

Plasmid pSV860